

Rendering of 808kW Solar Canopy to be installed over the North Parking Lot of the New Carrollton Federal Building

Quick Facts:

- Deep energy retrofit is designed to reduce energy consumption by 60% at NCFB
- Nearly 1MW of on-site solar and geothermal will be installed
- Ameresco will construct an 808kW solar canopy to cover all unshaded areas of the North Parking Lot
- More than 11,000 LED lights will be installed across the NCFB complex, including in the parking garage
- More than 2,000 new occupancy sensors will be installed
- Greenhouse gas emissions are expected to be reduced by 20,000 metric tons annually
- The project is funded by the private sector and will be repaid through energy cost savings
- Construction began in March 2014 and will conclude in 2015
- The buildings will remain fully occupied during construction of the project

Deep Energy Retrofit Project:

New Carrollton Federal Building Lanham, MD

In 2012, the GSA challenged energy service companies to innovatively improve the energy performance of 30 GSA-owned buildings.

The GSA selected Ameresco, Inc. to develop a deep energy retrofit for more than 1 million sq. ft. of office space at the New Carrollton Federal Building in Lanham, MD and the Silver Spring Metro Center 1 building in Silver Spring, MD. Ameresco began construction of the project in 2014.

The deep energy retrofit does not rely on taxpayer dollars; rather it is being contracted under a \$45 million **Energy Savings Performance Contract (ESPC)**, which is financed and implemented by the private sector.

The project is aimed towards reducing energy consumption at the New Carrollton Federal Building (NCFB) by 60 percent, and savings in the first year are expected to exceed \$2.5 million.

A combination of innovative load reduction and conservation measures will replace outdated building systems and equipment with higher efficiency technologies, including more than 11,000 LED lighting fixtures controlled by a new network of occupancy sensors capable of detecting motion and ambient light.

The HVAC system will be optimized to heat and cool only occupied spaces, and a new central chilled water plant incorporates a geothermal well field for heat rejection during the summer time, increasing the chillers' efficiency, while decreasing water consumption.

The geothermal well field and 808 kilowatts of solar will be installed below and above the north parking lot of the NCFB maximizing the use of land for renewable energy to be consumed on-site.

The solar array is a custom-designed structure in an amphitheater themed layout. It will provide shade to parked vehicles and will be surrounded by new rain gardens to support existing storm water catch basins. Ameresco also will install a 67 kilowatt carport structure in the south parking lot facing the New Carrollton Metro Stop.

To learn more, please visit: www.ameresco.com



